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10/061,813	01/31/2002	James Armand Baldwin	MS1-1011US	1857

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EXAMINER	
NGUYEN, MINH CHAU	

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/061,813	BALDWIN ET AL.	
	Examiner	Art Unit	
	MINH-CHAU N. NGUYEN	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *01/31/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-7, 14-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez et al. (Rodriguez) (US 2000/0059623 A1).
2. Regarding claim 1, Rodriguez teaches a method comprising:

storing program data for an EPG in DBDS, and presenting program data in channel-time grid which contains multiple records. Moreover, Rodriguez teaches multiple sets of tables which contains multiple data fields, and each table corresponding to its respective channel in the channel line-up. Rodriguez fails to teach grid as a form of table. Grid has rows and columns can be interpreted as table (Page 2, paragraph [0021]; and page 10, paragraph [0073]; and page 13, paragraph [0093]; and page 17, paragraph [0116], [0117]; and figure 5). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to store program data in multiple tables and to present it in grid in order to coalesce program data sets into one, and organize into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

sorting the records in the tables according to a selected field type prior to delivery of the program data to a remote client (page 13, paragraph [0091]; and page 17, paragraph [0116], [0117]; and page 2, paragraph [0021]; and page 4, paragraph [0032]).

3. Regarding claim 2, Rodriguez teaches a method as recited in claim 2, wherein EPG program data presents in channel-time grid which contains multiple records. Moreover, Rodriguez also teaches multiple sets of tables which contains multiple data fields, and each table corresponding to its respective channel in the channel line-up and corresponding to a subsequently contiguous 15 minutes increment of time. Therefore, these tables comprise a structure, and the sorting operation on the EPG data rearranges the records without changing the particular structure. Rodriguez fails to teach grid as a form of table. Grid has rows and columns can be interpreted as table (page 10, paragraph [0073]; and page 13, paragraph [0091]; and page 17, paragraph [0116], [0117]; and figure 5). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to store program data in multiple tables and to present it in grid in order to coalesce program data sets into one, and organize into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

4. Regarding claim 3, Rodriguez teaches a method as recited in claim 3, wherein the selected field type is selected from a group of fields including actor names,

program genre, title, and ratings (page 10, paragraph [0073]; and page 13, paragraph [0091]).

5. Regarding claim 4, Rodriguez teaches a method as recited in claim 4, wherein the records comprise program records containing programming information, individual program records having a title field to identify a program name (page 10, paragraph [0073]), and

Rodriguez teaches the sorting operation arranges the program records according to the title name in the title field. Rodriguez fails to teach the sorting of the name in the title field as a form of a stopped name version of the program name in the title field. The stopped name version of the program name in the title field can be interpreted as the name in the title field (page 13, paragraph [0091]). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to sort the program records according to the name in the title field in order to coalesce program data sets into one, and organize into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

6. Regarding claim 5, Rodriguez teaches a method as recited in claim 5, further comprising constructing a data file to hold the sorted tables (ex. EPG database is a data file) (page 13, paragraph [0090], [0091]; and page 17, paragraph [0116], [0117]).

7. Regarding claim 6, Rodriguez teaches a method as recited in claim 6, further comprising delivering the data file to the remote client (page 2, paragraph [0021]; and page 4, paragraph [0032]; and page 10, paragraph [0073]).

8. Regarding claim 7, Rodriguez teaches a method as recited in claim 7, wherein the storing, the sorting, and the constructing are repeated for each day of program data (page 13, paragraph [0091]; and page 16, paragraph [0110]).

9. Regarding claim 14, Rodriguez teaches a computer-readable medium comprising computer-executable instructions that, when executed, direct a computing system to:

sort program data for an electronic program guide according to the title name in the title field. Rodriguez fails to teach the sorting of the name in the title field as a form of a stopped name version of the program name in the title field. The stopped name version of the program name in the title field can be interpreted as the name in the title field (page 13, paragraph [0091]). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to sort the program records according to the name in the title field in order to coalesce program data sets into one, and organize into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

store the program data in a data structure for delivery to a remote client (ex. EPG database is a data structure) (page 2, paragraph [0021]; and page 4, paragraph [0032]; and page 10, paragraph [0073]; and page 13, paragraph [0090]).

10. Regarding claim 15, Rodriguez teaches a computer-readable medium as recited in claim 15, further comprising computer-executable instructions that, when executed, direct a computing system to deliver the data structure to the remote client (page 4, paragraph [0032]; and page 9, paragraph [0068]; and page 18, paragraph [0122]).

11. Regarding claim 16, Rodriguez teaches a data structure stored on a computer-readable medium, comprising:

storing program data for an EPG in DBDS, and presenting program data in channel-time grid which contains multiple records. Moreover, Rodriguez teaches multiple sets of tables which contains multiple data fields, and each table corresponding to its respective channel in the channel line-up. Rodriguez fails to teach grid as a form of table. Grid has rows and columns can be interpreted as table (Page 2, paragraph [0021]; and page 10, paragraph [0073]; and page 13, paragraph [0093]; and page 17, paragraph [0116], [0117]; and figure 5). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to store program data in multiple tables and to present it in grid in order to coalesce program data sets into one, and organize into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

Rodriguez teaches the grid composes of records with programming information, and the grid also has a title field to hold program titles. In addition, Rodriguez also teaches multiple sets of tables which contains multiple data fields, and each table corresponding to its respective channel in the channel line-up. Rodriguez fails to teach grid as a form of table. Grid has rows and columns can be interpreted as table (page 10, paragraph [0073]; and page 13, paragraph [0093]; and page 17, paragraph [0116], [0117]; and figure 5). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to store program data in multiple tables and to present it in grid in order to coalesce program data sets into one, and organize into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal; and

Rodriguez teaches the records being sorted by the title name in the title field. Rodriguez fails to teach the sorting of the name in the title field as a form of a stopped name version of the program name in the title field. The stopped name version of the program name in the title field can be interpreted as the name in the title field (page 13, paragraph [0091]). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to sort the program records according to the name in the title field in order to coalesce program data sets into one, and organize into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

12. Regarding claim 17, Rodriguez teaches a computer system, comprising:

a memory (page 7, paragraph [0059]);

a processor coupled to the memory (page 7, paragraph [0059]); and

a data sorter program stored in memory and executed on the processor to sort electronic program guide (EPG) data according to a data type prior to delivery of the EPG data to a remote client (page 7, paragraph [0059]; and page 8, paragraph [0061]; and page 13, paragraph [0091]; and page 2, paragraph [0021]; and page 4, paragraph [0032]).

13. Regarding claim 18, Rodriguez teaches a computer system as recited in claim 18, wherein the data type is a program title (page 13, paragraph [0091]), and

Rodriguez also teaches the data sorter program is configured to sort the EPG data according to a title name in the title field. Rodriguez fails to teach the sorting of the name in the title field as a form of a stopped name version of the program name in the title field. The stopped name version of the program name in the title field can be interpreted as the name in the title field (page 13, paragraph [0091]). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to sort the program records according to the name in the title field in order to coalesce program data sets into one, and organize into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

14. Regarding claim 19, Rodriguez teaches a computer system as recited in claim 19, wherein there is EPG data for multiple days, and the data sorter program is configured to sort the EPG data separately for each day (page 13, paragraph [0091]; and page 16, paragraph [0110]).

15. Regarding claim 20, Rodriguez teaches a processing system, comprising:

sorting means for sorting program data for an electronic program guide according to a data type that a viewer is likely to search (page 13, paragraph [0091]; and page 14, paragraph [0097]); and

transmission means for transmitting the sorted program data to the client (page 2, paragraph [0021]; and page 4, paragraph [0032]).

16. Regarding claim 21, Rodriguez teaches the sorting means sorts the program data according to the title name in the title field. Rodriguez fails to teach the sorting of the name in the title field as a form of a stopped name version of the program name in the title field. The stopped name version of the program name in the title field can be interpreted as the name in the title field (page 13, paragraph [0091]). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to sort the program records according to the name in the title field in order to coalesce program data sets into one, and organize into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

17. Regarding claim 22, Rodriguez teaches a television entertainment system, comprising:

multiple clients to receive television signals and corresponding program data for an electronic program guide (EPG), individual clients having a search engine to search the program data (page 2, paragraph [0021]; and page 4, paragraph [0032]; and page 8, paragraph [0063]); and

an EPG server to sort the program data prior to delivery to the client, the program data being sorted according to a selected parameter to place the program data in a sorted arrangement to facilitate searching at the client (page 13, paragraph [0091]; and page 2, paragraph [0021]; and page 4, paragraph [0032]).

18. Regarding claim 23, Rodriguez teaches a television entertainment system as recited in claim 23, wherein the EPG server sorts the program data according to program title (page 13, paragraph [0091]).

19. Regarding claim 24, Rodriguez teaches the sorting the program data according to the title name in the title field. Rodriguez fails to teach the sorting of the name in the title field as a form of a stopped name version of the program name in the title field. The stopped name version of the program name in the title field can be interpreted as the name in the title field (page 13, paragraph [0091]). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to

sort the program records according to the name in the title field in order to coalesce program data sets into one, and organize into a format suitable for reception and interpretation by the EPG application running on the digital home communication terminal.

20. Claims 8-10, 12-13, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez et al. (Rodriguez) (US 2000/0059623 A1), and further in view of Etheredge (6,018,372).

21. Regarding claim 8, Rodriguez teaches storing program data for an EPG in the system memory at a client/ viewer, and presenting program data in channel-time grid which contains multiple records. In addition, the records contain programming information, and have a title field for program titles. However, Rodriguez fails to teach storing program data in the grid (Grid has rows and columns can be interpreted as table) (page 8, paragraph [0063]; and page 10, paragraph [0073]; and figure 5), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way of doing so. Etheredge teaches storing program data for and EPG in multiple tables (Col. 7, L. 61 – Col. 8, L. 20).

Thus, it would have been obvious to one of ordinary skill in the art the time the invention was made to have incorporated the storing program data for and EPG in multiple tables, as suggested by Etheredge, in the digital subscriber television networks with local physical storage devices and virtual storage of Rodriguez, in

which allowing a viewer to access programming information relevant to the viewer interest while reducing the amount of data the user must view; and

Rodriguez fails to teach sorting the records in the program tables according to the title field at the client/ viewer. However, Rodriguez teaches the client stores and then read the sorted program records which are already sorted by the server. The client can retrieve in the presentation of records in the grid (page 8, paragraph [0061]; and page 10, paragraph [0073]), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way of doing so. Etheredge teaches sorting the records in the program tables according to the title field (ex. grids have rows and columns are same as tables) (abstract; and Col. 18, L. 56 – Col. 19, L. 10; and figure 25&26);

Thus, it would have been obvious to one of ordinary skill in the art the time the invention was made to have incorporated the sorting the records in the program tables according to the title field, as suggested by Etheredge, in the digital subscriber television networks with local physical storage devices and virtual storage of Rodriguez, in which allowing a viewer to access programming information relevant to the viewer interest while reducing the amount of data the user must view; and

Rodriguez fails to teach constructing a data file to hold the tables at the client. However, Rodriguez teaches constructing EPG database to hold the EPG data (page 10, paragraph [0073]), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way of doing so. Etheredge teaches

constructing a data file to hold the tables at the client (ex. titles database is a data file) (Col. 7, L. 61 – Col. 8, L. 20);

Thus, it would have been obvious to one of ordinary skill in the art the time the invention was made to have incorporated the constructing a titles database to hold the tables, as suggested by Etheredge, in the digital subscriber television networks with local physical storage devices and virtual storage of Rodriguez, in which allowing a viewer to access programming information relevant to the viewer interest while reducing the amount of data the user must view.

22. Regarding claim 9, Rodriguez also teaches the data sorter program is configured to sort the EPG data according to a title name in the title field at the server. Rodriguez fails to teach sorting the EPG data according to a title name in the title filed at the client, and also fails to teach the sorting of the name in the title field as a form of a stopped name version of the program name in the title field. The stopped name version of the program name in the title field can be interpreted as the name in the title field (page 13, paragraph [0091]), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way of doing so. Etheredge teaches sorting comprises arranging the records according to the name in the title field (abstract; and Col. 6, L. 5-25; and Col. 18, L. 56 – Col. 19, L. 10);

Thus, it would have been obvious to one of ordinary skill in the art the time the invention was made to have incorporated the sorting comprises arranging the records according to the name in the title field, as suggested by Etheredge, in the

digital subscriber television networks with local physical storage devices and virtual storage of Rodriguez, in which allowing a viewer to access programming information relevant to the viewer interest while reducing the amount of data the user must view A method as recited in claim 8, wherein the sorting comprises arranging the records according to stopped name versions of program names in the title field.

23. Claim 10 lists all of the same elements of claim 6. Therefore, the same rationale of the rejection to claim 6 applies equally as well to claim 10.

24. Regarding claim 12, Rodriguez- Etheredge discloses the invention substantially as claimed. Etheredge discloses the storing, the sorting, and the constructing are repeated for each day of program data (Col. 7, L. 61 – Col. 8, L. 20; and Col. 18, L. 56 – Col. 19, L. 25).

25. Regarding claim 13, Rodriguez- Etheredge discloses the invention substantially as claimed. Etheredge discloses a method as recited in claim 13, further comprising:

delivering the data files to the remote client (see Rodriguez, page 2, paragraph [0021]; and page 4, paragraph [0032]); and

searching, at the client, the program records in each of the data files for each day of program data to produce temporary results from each of the data files and subsequently searching the temporary results (see Etheredge, Col. 8, L. 20-35).

26. Regarding claim 26, Rodriguez teaches a television entertainment system as recited in claim 26, wherein the program data covers multiple days, and the EPG server is configured to sort the program data for each day separately from other days (page 13, paragraph [0091]; and page 16, paragraph [0110]), and

Rodriguez teaches the client performs a first phase involves a search of the program data for each day (page 8, paragraph [0063]; and page 16, paragraph [0110]). However, Rodriguez fails to teach the client performs a second phase involves a search of results produced from the first phase. Rodriguez teaches base on the results from the first phase, the client search for the updated data (page 14, paragraph [0096]), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way of doing so. Etheredge teaches the client performs a second phase involves a search of results produced from the first phase (ex. the client an agent criteria) (Col. 8, L. 20-35).

Thus, it would have been obvious to one of ordinary skill in the art the time the invention was made to have incorporated the client performs a second phase which is searching the agent criteria, involves a search of results produced from the first phase which is searching of the program data for each day, as suggested by Etheredge, in the digital subscriber television networks with local physical storage devices and virtual storage of Rodriguez, in which allowing a viewer to access programming information relevant to the viewer interest while reducing the amount of data the user must view.

27. Claims 11, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez-Etheredge as applied to claim 8, 22 above, and further in view of Beach et al. (Beach) (US 2003/0014753 A1).

28. Regarding claim 11, Rodriguez- Etheredge is relied upon for the disclosure set forth in the previous rejection. Rodriguez- Etheredge fails to discloses searching at the client, the program records using a binary search. However, Etheredge teaches searching at the client, the program records using a search agent (Col. 6, L. 5-25), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way of doing so. Beach teaches searching at the client, the program records using a binary search (page 3, paragraph [0049]; and page 4, paragraph [0053]).

Thus, it would have been obvious to one of ordinary skill in the art the time the invention was made to have incorporated searching at the client, the program records using a binary search, as suggested by Beach, in the electronic program guide with multiple day planner of Etheredge, with Rodriguez's teaching of the digital subscriber television networks with local physical storage devices and virtual storage of Rodriguez, in order to have an interactive program guide that affords the viewer more flexible search options would be a significant technological advance.

29. Regarding claim 25, Rodriguez- Etheredge is relied upon for the disclosure set forth in the previous rejection. Rodriguez- Etheredge fails to discloses searching at the client, the program records using a binary search. However, Etheredge teaches searching at the client, the program records using a search agent (Col. 6, L. 5-25), such suggestion would motivate one ordinary skilled in the art to seek a practical and effective way of doing so. Beach teaches searching at the client, the program records using a binary search (page 3, paragraph [0049]; and page 4, paragraph [0053]).

Thus, it would have been obvious to one of ordinary skill in the art the time the invention was made to have incorporated searching at the client, the program records using a binary search, as suggested by Beach, in the electronic program guide with multiple day planner of Etheredge, with Rodriguez's teaching of the digital subscriber television networks with local physical storage devices and virtual storage of Rodriguez, in order to have an interactive program guide that affords the viewer more flexible search options would be a significant technological advance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU N. NGUYEN whose telephone number is (571) 272-4242. The examiner can normally be reached on Monday-Friday from 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VALENCIA M. WALLACE can be reached on (571) 272-6159. The fax

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Minh-Chau Nguyen
Art Unit: 2145

MN

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